

I claim:

1. A form-fill-seal machine for making a pouch style package with a flap that is folded over, comprising:

a flap making station comprising:

- 5 a reciprocating vacuum bar;
- a reciprocating pressure bar;
- a folder bar; and
- a flap folder;

10 wherein, in the flap making station, a portion of the pouch is pressed between the reciprocating vacuum bar and the reciprocating pressure bar, the reciprocating vacuum bar draws the pouch past the folder bar which folds over a portion of the pouch to form a flap, and the flap folder presses the flap against a surface of the pouch to seal the flap.

- 15 2. A form-fill-seal machine for making a pouch style package, comprising:

a bulge forming station comprising:

- a pressure bar; and
- a vacuum forming bulge die;

wherein, in the bulge forming station, a film is forced into the die, thermoforming a puff or bulge in the film.

3. A form-fill-seal machine for making an instant opening containment and dispensing package, comprising:

5 (a) support and braking means for at least two opposing continuous film supplies which are intermittently, simultaneously unwound by a controllable motor;

(b) an aperture means creating station wherein at least one of said film supplies is intermittently indexed through said aperture means creating station;

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- (c) a bulge forming station comprising:

a set of heating dies;

a pressure bar; and

a vacuum forming bulge die;

15 wherein, in the bulge forming station, at least one of said film supplies is forced into the die, thermoforming a puff or bulge in the film;

- (d) a heating and sealing and filling station comprising:

a set of reciprocating seal dies; and

a filler nozzle;

wherein the set of reciprocating seal dies come together to create a lower seal and edge seals between at least two of said film supplies, forming a pouch to be filled, and wherein the pouch is filled by dispensing a product through the filler nozzle;

- (e) a set of chill dies to chill said lower seal and said edge seals;
- (f) vertical slitting crush rollers positioned along a path of travel of at least one film supply; and

- (g) a cut-off and flap making station comprising:

cutting means for severing the pouch from the film supply;

a reciprocating vacuum bar;

a reciprocating pressure bar;

a folder bar; and

a flap folder;

wherein a portion of the package just beneath a portion to become a fold over flap is pressed between the reciprocating vacuum bar and the reciprocating pressure bar, the reciprocating vacuum bar draws the pouch past the folder bar which folds over a

portion of the pouch to form a flap, and the flap folder presses the flap against a surface of the pouch to seal the flap.

4. A form-fill-seal machine as claimed in claim 3, wherein the aperture means creating station comprises a punch means for forming an aperture in said at least one of said film supplies that is intermittently indexed through said aperture means creating station.

5. A form-fill-seal machine as claimed in claim 3, wherein the aperture means creating station comprises means for creating a breakaway tip structure in said at least one of said film supplies that is intermittently indexed through said aperture means creating station.

6. A form-fill-seal machine as claimed in claim 3, wherein the aperture means creating station comprises means for creating a fault line in said at least one of said film supplies that is intermittently indexed through said aperture means creating station.

7. A form-fill-seal machine as claimed in claim 3, wherein the aperture

means creating station comprises means for creating a score line in said at least one of said film supplies that is intermittently indexed through said aperture means creating station.

8. A form-fill-seal machine as claimed in claim 3 wherein the folder bar and  
5 flap folder are each dentilated so as to mesh when forming said flap.
9. A form-fill-seal machine as claimed in claim 3 wherein the cut-off and flap making station is mounted on a sub-frame,  
the sub-frame being adjustable in at least two directions.